ATTITUDE AND AWARNESS OF PROSPECTIVE TEACHERS TOWARDS DIGITAL GAME-BASED LEARNING (DGBL)

A

RESEARCH SYNOPSIS

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Attitude and Awareness of Prospective Teachers towards Digital Game-Based learning

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Introduction:

"Attitude and Awareness of Prospective Teachers towards Digital Game-Based Learning (DGBL)"

In the 21st century, research is being carried out in various sub-sectors of education, in which "Digital Game-Based Learning" (DGBL) method is an innovative emerging and propagating field. Digital game-based learning method (DGBL) is defined as the use of a game format in non-game based content. The Digital Game-Based Learning (DGBL) method is a learning strategy\approach, in which the tools of digital games or computer games such as role based games, real games, strategy games, shooting games, adventure games, puzzle games, chess games, etc. are often seen as a learning outcome and which is a developing trend in e-learning (Prensky, 2001).

Digital games are a new innovative interactive technique in the field of multimedia learning environments, which make learning effective and interesting for young learners. When digital games are used in the context of education, they are referred to as educational games.

Digital game-based learning combines academic content with computer and video games in creating creative theories in the field of education and use it in all kinds of subjects and skills. In the context of digital game-based learning, it can be argued that it provides learners with opportunities to learn in an interactively intuitive environment and prepares them for participation in the global technological society of the 21st century (Coffey, 2009). Digital game-based learning aims to address innovative methods to ICT-based instructional design as well as provide learners with the potential to acquire skills and competencies.

Review literature:

Dr. Rastogi (2019) endeavoured to draw a leaflet based on information gathered from the documented research method to find out what are the benefits of digitization of education and

what is adverse impact on the students and society of over-reliance on digital methods of education based on the adoption of ICT tools? The study found that digitization has extended to all walks of life, from traditional chalk and talk based learning to virtual learning environments. Teachers are providing online tutorials through many online learning applications like BYJU'S, Cuemath, GuruQ.in, EPathshala, Google Classroom etc.

Rudat and Saunders (2017) studied the first-year faculty of commerce in Capetown on the perception of digital game-based learning. In the research presented, 139 students (62.6% female and 37.4% male) were presented as net generation and using a 5-point Likert scale through the deductive approach found that the perception of the students' towards DGBL was positive (54.7%).

Li (2016-2017) conducted this short study on the attitude of 76 female teachers towards the use of digital game-based learning in teaching English subject in primary school school in china. Based on the analysis carried out through the 5-point Likert scale, it was concluded that teachers' attitude towards the experiment of digital Game-Based Learning was strongly agreed (18.4%), neutral (60.5%), meaningful (78.9%).

Significance of the study:

There are several aspects to the significance of this study. One of the major objectives of the Teacher Education Program at the present time is to prepare prospective teachers who can develop new technologies and media as tools that can be used in the educational context. The study seeks to expand the scope of research work on the subjects by examining the attitude of prospective teachers, their gaming experience, self-efficacy and perceived challenges and barriers in the use of digital game-based learning (DGBL) in the classroom, simplifying and engaging lessons and adopting digital game-based learning (DGBL) as an interesting learning method.

Statement of the Study:

At present, to increase the quality of education, its new dimension is being explored, under which the congruence of the classroom should be increased by using digital tools in the format of games. Under this, digital game based teaching is an innovative and alternative source.

Title:

"Attitude and Awareness of Prospective Teachers towards Digital Game-Based Learning (DGBL)"

Operational definition:

Digital Game-Based Learning: Digital Game-Based Learning (DGBL) is an instructional application used to create an engaging and comprehensive learning experience based on the features of video and computer games.

Attitude: The general meaning of attitude is the presence of positive or negative attitude towards a psychological subject. Attitude in this study refers to the special attitude of future teachers in the context of digital games.

Awareness: Awareness is the state of being aware of something. Specifically, the ability to directly know and perceive, feel, or be cognizant of events. Awareness in this study is related to the awareness of future teachers regarding the emergence, development, facts and use of digital games in educational context.

Teacher-Training Program: The teacher-education program is designed for prospective teachers or candidates who wish to acquire in-depth knowledge in the field of pedagogy and prepare prospective teachers for different levels of education in the future.

Prospective teacher: Students studying under teacher education program, who will become future teachers through B.ed and D.el.ed courses.

Research Objectives:

i. To study the attitude of prospective teachers towards Digital Game-Based Learning (DGBL).
ii. To study the awareness of prospective teachers towards Digital Game-Based Learning (DGBL).
iii. To study the significant relationship between attitude and awareness of prospective teachers towards Digital Game-Based Learning (DGBL).

Research Objectives:

Attitude of prospective teachers towards the use of Digital Game-Based Learning (DGBL)

1. To find out the significance difference in attitude of female and male prospective teachers towards the use of Digital Game-Based Learning (DGBL).
2. To find out the significance difference in attitude of prospective teachers in rural and urban areas towards the use of Digital Game-Based Learning (DGBL).
3. To find out the significance difference in attitude of prospective teachers holding higher secondary, graduate and post-graduate degrees towards the use of Digital Game-Based Learning (DGBL).
4. To find out the significance difference in attitude of prospective teachers of various faculties, such as: arts, science and commerce towards the use of Digital Game-Based Learning (DGBL).
5. To find out the significant difference in the attitude of technically trained and untrained prospective teachers towards the use of Digital Game-Based Learning (DGBL).

Awareness of prospective teachers towards the use of Digital Game-Based Learning (DGBL)

6. To find out the significance difference in awareness of female and male prospective teachers towards the use of Digital Game-Based Learning (DGBL).
7. To find out the significance difference in awareness of prospective teachers in rural and urban areas towards the use of Digital Game-Based Learning (DGBL).
8. To find out the significance difference in awareness of prospective teachers holding higher secondary, graduate and post-graduate degrees towards the use of Digital Game-Based Learning (DGBL).
9. To find out the significance difference in awareness of prospective teachers of various faculties, such as: arts, science and commerce towards the use of Digital Game-Based Learning (DGBL).
10. To find out the significant difference in the awareness of technically trained and untrained prospective teachers towards the use of Digital Game-Based Learning (DGBL).

Relationship between prospective teachers' attitudes and awareness towards Digital Game-Based Learning (DGBL)

11. To find out the significant correlation between the attitude and awareness of prospective teachers towards the use of Digital Game-Based Learning (DGBL).
12. To find out the significant correlation between the attitude and awareness of female prospective teachers towards the use of digital game-based learning (DGBL).
13. To find out the significant correlation between the attitude and awareness of male prospective teachers towards the use of digital game-based learning (DGBL).

NULL HYPOTHESES

Attitude of prospective teachers towards the use of Digital Game-Based Learning (DGBL)

1. There is no significant difference in the attitude of male and female prospective teachers towards the use of digital game-based learning (DGBL).
2. There is no significant difference in the attitude of rural and urban prospective teachers towards the use of digital game-based learning (DGBL).
3. There is no significant difference in attitude of prospective teachers holding higher secondary, graduate and post-graduate degrees towards the use of Digital Game-Based Learning (DGBL).
4. There will be no significant difference in the attitude of prospective teachers from different faculties, such as Arts Faculty, Science Faculty, Commerce Faculty, towards the use of Digital Game-Based Learning (DGBL).
5. There is no significant difference in the attitude of technically trained and untrained prospective teachers towards the use of Digital Game-Based Learning (DGBL).

Awareness of prospective teachers towards the use of Digital Game-Based Learning (DGBL)

6. There is no significant difference in the awareness of male and female prospective teachers towards the use of digital game-based learning (DGBL).
7. There is no significant difference in the awareness of rural and urban prospective teachers towards the use of digital game-based learning (DGBL).
8. There is no significant difference in awareness of prospective teachers holding higher secondary, graduate and post-graduate degrees towards the use of Digital Game-Based Learning (DGBL).

9. There is no significant difference in the awareness of prospective teachers from different faculties, such as Arts Faculty, Science Faculty, Commerce Faculty, towards the use of Digital Game-Based Learning (DGBL).
10. There is no significant difference in the awareness of technically trained and untrained prospective teachers towards the use of Digital Game-Based Learning (DGBL).

Relationship between prospective teachers' attitudes and awareness towards Digital Game-Based Learning (DGBL)

11. There will be no significant correlation between the attitude and awareness of prospective teachers towards the use of Digital Game-Based Learning (DGBL).
12. There is no significant correlation between the attitude and awareness of female prospective teachers towards the use of Digital Game-Based Learning (DGBL).
13. There is no significant correlation between the attitude and awareness of male prospective teachers towards the use of Digital Game-Based Learning (DGBL).

RESEARCH METHODOLOGY:

Researcher will use quantitative method to study the attitude and awareness of Prospective Teachers towards Digital Game-Based Learning (DGBL).

Method:

In the present study the investigator will adopt the descriptive survey method of research.

Population of the Study:

The population for the study will be the Prospective Teachers of Colleges of Education of Bihar who are pursuing B.Ed. and D.el.ed course.

Sample and Sampling Technique

The sample will consist of 1000 Prospective Teachers of Bihar. The investigator will use stratified random sampling technique for selecting the sample.

Tools proposed to be used:

In the research proposal, two tools have been selected to study the attitude and awareness of future teachers towards Digital Game Based Learning (DGBL). Assessment scale has been

selected for the study of attitude and multiple choice questionnaire has been selected for the study of awareness.

i. Attitude Scale Tool Developed by Dr. Patrick Dickson (2015) for Measuring Attitude towards Digital Game Based Learning
ii. A self made awareness test will be used to measure awareness towards digital game based learning.

Statistical Techniques Proposed To Use:

For analyzing data following statistical techniques will be used:

i. Mean
ii. Standard Deviation
iii. Variance Analysis
iv. T-test
v. Pearson's product-moment correlation

Delimitation of the Study:

1. The study will be limited to Bihar.
2. The study will be limited to only 1000 prospective teachers.
3. The study will be limited only to the students of B.Ed. and D.El.Ed. Teacher education institutions.
4. The study will be limited only to future teachers on the basis of knowledge of female and male, graduate and post graduate, rural and urban, arts faculty, science faculty and vocational faculty and information and communication technology.

Chapterization:

Chapter 1: Introduction and Concept Framework

Chapter 2: Review of Related Literature

Chapter 3: Research Method

Chapter 4: Data Analysis

Chapter 5: Results, Conclusion, and Suggestions

TIME BUDGETING

The investigator has proposed the following breakup of the schedule for the completion of the research/dissertation work.

a) Review of Related Literature……
b) Construction and validation of tools
c) Collection of data…..
d) Data analysis
e) Chapter writing
f) Typing and binding
g) Editing and revising

Total

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